

Claims

1. A process for producing 2,3-pyridinedicarboxylic acid comprising (a) oxidizing quinoline or 8-hydroxyquinoline in a solvent in the presence of copper (II) ions to precipitate copper (II) salt of 2,3-pyridinedicarboxylic acid and then separate
5 the precipitates, (b) reacting the separated copper (II) salt with an alkali in a solvent to obtain a solution of an alkali metal salt of 2,3-pyridinedicarboxylic acid, and (c) reacting the solution of the alkali metal salt with a mineral acid to precipitate 2,3-pyridinedicarboxylic acid and then separate the precipitates,

characterized in that part or all of the solution obtained after the precipitated
10 2,3-pyridinedicarboxylic acid is separated in step (c) is used as at least part of the solvent in step (a) or (b).

2. A process for producing 2,3-pyridinedicarboxylic acid comprising (a) oxidizing quinoline or 8-hydroxyquinoline in a solvent in the presence of copper (II) ions to precipitate copper (II) salt of 2,3-pyridinedicarboxylic acid and then separate
15 the precipitates, (b) reacting the separated copper (II) salt with an alkali in a solvent to obtain a solution of an alkali metal salt of 2,3-pyridinedicarboxylic acid, and (c) reacting the solution of the alkali metal salt with a mineral acid to precipitate 2,3-pyridinedicarboxylic acid and then separate the precipitates,

characterized in that copper or a copper compound is added to the solution
20 obtained after the precipitated 2,3-pyridinedicarboxylic acid is separated in step (c) to recover the 2,3-pyridinedicarboxylic acid remaining in the solution as its copper (II) salt.

3. The process of claim 2, wherein the recovered copper (II) salt is recirculated to step (b).

25 4. The process of claim 1, wherein the oxidation in step (a) is carried out by oxidizing quinoline or 8-hydroxyquinoline with a chlorate as an oxidizing agent under acidic conditions.

5. The process of claim 2, wherein the oxidation in step (a) is carried out by oxidizing quinoline or 8-hydroxyquinoline with a chlorate as an oxidizing agent under acidic conditions.

6. The process of claim 1, wherein the solution of an alkali metal salt of
5 2,3-pyridinedicarboxylic acid obtained in step (b) is purified, prior to treatment in step (c), by adding at least one substance selected from sulfides, hydrosulfides, polysulfides, and sulfur and removing the resulting precipitates.

7. The process of claim 2, wherein the solution of an alkali metal salt of
2,3-pyridinedicarboxylic acid obtained in step (b) is purified, prior to treatment in step
10 (c), by adding at least one substance selected from sulfides, hydrosulfides, polysulfides, and sulfur and removing the resulting precipitates.

8. The process of claim 1, wherein the solvent is water in each reaction of steps (a) and (b).

9. The process of claim 2, wherein the solvent is water in each reaction of
15 steps (a) and (b).